



Substitute Claims for RCE

12. A method for proportioning a fire fighting chemical into variably flowing fire fighting fluid, comprising:

adjusting a fire fighting fluid orifice in a fire fighting fluid conduit to maintain a predetermined pressure drop across the orifice as fire fighting fluid flow rate through the conduit varies;

varying a fire fighting foam concentrate orifice in concert with the adjustment of the fire fighting fluid orifice; and

supplying fire fighting foam concentrate through the concentrate orifice into the fire fighting fluid proximate a pressure drop such that a ratio of the foam concentrate proportioned into the fire fighting fluid flowing through the conduit, to the fluid, remains approximately constant.

13. The method of claim 14 wherein varying a fire fighting fluid orifice includes adjusting a lateral movement of a baffle within the conduit.

14. A method for automatically proportioning foam into variably flowing fire fighting fluid, comprising:

varying a fire fighting fluid orifice in a conduit to maintain a preselected pressure drop in the conduit and wherein the varying fire fighting fluid orifice acts as a fire fighting fluid flow rate indicator;

varying a foam concentrate orifice, at a rate calibrated in concert with variations of the fire fighting fluid orifice; and

discharging foam concentrate through the variable foam concentrate orifice proximate a low pressure zone created by a pressure drop at an approximately constant ratio to the fluid.

15. The method of claim 14 that includes varying the fire fighting fluid orifice based upon a spring resisting fire fighting fluid pressure in the conduit.

16. The method of claim 14 wherein varying the fire fighting fluid orifice includes setting a pilot valve to maintain one or more pre-selected pressure drops across the orifice.